



Science and
Technology
Facilities Council



BUSINESS
INCUBATION
CENTRE

United
Kingdom

15 years of impact

ESA Business Incubation Centre United Kingdom
Impact Report

Foreword

"15 years ago, I founded the ESA BIC UK programme in partnership with ESA and the UK Space Agency. My intention and hope was to help our promising UK space-tech startups get their inventions out of the workshop and into customers' hands.

"15 years later, we can see how much the programme has delivered. The programme has supported almost 180 startups. Together, these innovative companies have created over 1,000 highly skilled jobs across the UK, raised over £640 million in private investment and generated £486 million in economic impact. For every £1 we have invested in the programme, we have returned almost £11 to the UK economy.



"The ESA BIC UK plays a vital role in the early years of a start-up, helping them to build the skills and resilience they need to succeed. As the UK Government launches our new National Space Strategy in 2026, this support is needed more than ever. Over the next 15 years, many of the innovations that will help keep the UK safe and reinforce our world-leading position in space will come from home-grown startups.

"I look forward to working with colleagues across UK Research and Innovation, the UK Space Agency and ESA as the ESA BIC UK continues to build this pipeline of innovations and underpin the UK's prosperity."

Paul Vernon, UK Research and Innovation, Executive Director

"The ESA BIC UK continues to back incredible space research and innovation to improve people's lives, from cancer medicines manufactured in microgravity to monitors preventing grain spoilage.

"Their work to turn great ideas into successful businesses has so far created more than 1,000 skilled jobs while attracting hundreds of millions of pounds in private investment.

"Programmes like this will continue to be vital as we deliver our new National Space Strategy and back the next generation of space businesses to start up, scale up and succeed."

Baroness Lloyd CBE, Minister for Space, Cyber and Regulatory Reform

“In 2026, we celebrate the 15th anniversary of the ESA Business Incubation Centre UK. Over the past 15 years, ESA BIC UK has funded and helped de-risk almost 180 UK space technology start-ups, turning ambitious ideas into viable businesses while also generating tangible benefits for the UK economy and its space sector. This report reflects on that journey and highlights the impact of ESA BIC UK and its partners.



“A joint endeavour between UKRI-STFC, the UK Space Agency and ESA, ESA BIC UK is an integral part of the wider ESA BIC network, the largest network of space incubators in Europe. It provides entrepreneurs with expert technical support, business mentoring, access to funding opportunities, and valuable connections with industry, investors, universities and public institutions. By supporting the commercialisation of space technologies and satellite data applications, it strengthens the UK’s innovation ecosystem, creates highly skilled jobs, and contributes to European competitiveness and growth.

“ESA’s vision is to elevate the future of Europe through space. Innovation and entrepreneurship are central to achieving that ambition and to ensuring that space delivers lasting benefits for citizens and society. I am confident that ESA BIC UK will continue to nurture outstanding ideas, enable new businesses to grow, and make a significant contribution to Europe’s future in space.”

Josef Aschbacher, ESA Director General

“For the UK government, the security angle of space is more and more important. There’s a recognition that space is a crucial defence and security domain. The dramatic fall in launch costs [also] means there are commercial opportunities on a scale that didn’t exist before.

“For UK citizens, space is now critical national infrastructure. Services that citizens depend on are increasingly delivered through space. The case for [investing in] space is the same as the case for water pipes and gas pipes and solar panels.

“The second thing for all citizens, which we sometimes overlook, is the sheer excitement of space discovery. People see and hear about exciting space projects and space discovery and they find that interesting. Then, they realise that governments have a role in funding it.”

Lord Willetts, Former Chair of the UK Space Agency

Version 1

September 2026

15 Years of Impact: ESA Business Incubation Centre UK

A report to the Science and Technology Facilities Council (STFC)

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1 Executive Summary



2 Introduction

2026 marks the 15th anniversary of the opening of the European Space Agency (ESA)'s Business Incubation Centre (BIC) in the UK. The programme is co-funded by UK Research and Innovation's Science and Technology Facilities Council (UKRI-STFC) and the UK Space Agency through the United Kingdom's subscription to the European Space Agency (ESA). Since 2020, Space Park Leicester has also part-funded the programme. Together, these organisations have supported ESA BIC UK's mission to help innovative start-ups commercialise space technologies, develop space-enabled applications, and grow sustainable businesses. To commemorate this anniversary, UKRI-STFC have appointed the independent research consultancy, Technopolis, to assess ESA BIC UK's impact since its creation.

The report provides an overview of the ESA BIC UK programme, highlighting the support it has provided to innovative start-ups, and the impacts that companies commonly experience during and after incubation. It also examines ESA BIC UK's broader contribution to the growth of the UK space and innovation ecosystem.

2.1 Developing this report

This report brings together evidence from a range of sources to build a picture of ESA BIC UK's impact over the past 15 years. Undertaken between June and August 2026, the research draws on evidence relating to the period from the programme's launch in 2010 and its first cohort in 2011, through to the end of the FY2025/2026, when the most recent monitoring and economic impact data were available.

We have drawn on the following evidence:

- Existing UKRI-STFC programme monitoring information, including data on participating companies, previous case studies, and UKRI-STFC's own analysis of the economic impact generated by supported businesses (drawing on a Technopolis-developed methodology for ESA BIC UK in 2024).
 - These economic impact estimates are based on a model which combines survey evidence from supported businesses and alumni, and secondary data average labour costs in different sectors from the ONS. These secondary data sources have helped derive GVA figures based on employment costs.
- Stakeholder interviews with key figures in the UK space sector, and within the UK space business community.
- Supplementary desk-based research, with sources including websites and web pages of ESA BIC alumni and incubatees showcasing recent progress, and news articles and articles on funded companies published by space hubs (e.g. Space Park Leicester).

3 About ESA BIC UK

The ESA BIC programme is one of ESA's flagship initiatives for supporting entrepreneurship and commercialisation. Established in 2004, the programme helps early-stage companies turn innovative ideas linked to space technology into viable businesses. While some supported companies operate directly in the space sector, many apply space-derived technologies, data or expertise to challenges in fields such as healthcare, agriculture, energy, environmental management, transport, and digital technology.

Over the past two decades, ESA BIC has grown into the largest network of business incubators in Europe.¹ As of 2026, the network comprises 40 incubators across 23 ESA Member States, with activities delivered through more than 100 incubation locations. Since its launch, the programme has supported over 2,000 start-ups, with approximately 280 new businesses joining each year. Collectively, ESA BIC-supported companies have secured more than €1.25 billion in private investment, generated hundreds of patents, and created thousands of jobs across Europe.²

3.1 The UK's participation in ESA BIC

Established in 2010 as the fifth member of the European Space Agency's Business Incubation Centre (ESA BIC) network, ESA BIC UK is one of the network's longest-running incubators.³ ESA BIC UK supports UK-based start-ups to commercialise space technologies, apply them in non-space markets, and develop products and services for the space sector, while benefiting from access to the expertise, partnerships and markets offered by the wider European network.

ESA BIC UK is part of ESA's ACCESS Programme. It is managed, delivered and co-funded by UKRI-STFC. Through this role, UKRI-STFC provides access to business support, technical expertise, facilities, funding, and networks that can help companies accelerate their growth. Participating companies must be: UK registered, less than five years old, have a viable business plan and demonstrate a clear connection to space technologies or applications.

ESA BIC UK participation requirements

- ☒ UK registered company, with a minimum of one company member located in the UK
- ☒ New or existing company less than 5 years old
- ☒ Demonstrated and clear connection to space technologies or applications
- ☒ Viable business plan

Source: ESA BIC website

Research on entrepreneurship support programmes suggests that start-ups benefit most from programmes that combine seed funding with knowledge-building activities, structured business support, sector-specific expertise, networking opportunities and sustained engagement over time.⁴ ESA BIC UK incorporates each of these elements within a single package: successful companies gain access to a two-year support package that includes more than £51,000 of incubation funding, tailored business development support, technical expertise, office and laboratory facilities, opportunities to engage with investors and customers,

¹ European Space Agency (ESA), *ESA Business Incubation Centres*, available at: [ESA Business Incubation Centres](#).

² European Space Agency (2025), *ESA Business Incubation Centres celebrate two decades of innovation*, 14 February 2025. Available at [ESA Business Incubation Centres celebrate two decades of innovation](#).

³ European Space Agency (2021), *Meet ESA BIC UK*. Available at: [Meet ESA BIC UK](#).

⁴ Assenova, V.A. and Amit, R. (2024), *Poised for growth: Exploring the relationship between accelerator program design and startup performance*. *Strategic Management Journal*, 45(6), pp. 1029-1060. Available at: <https://doi.org/10.1002/smi.3581>.

and access to industry and research networks. ESA BIC UK is therefore helping participating companies strengthen their capabilities, develop commercial traction and progress towards sustainable growth. It is also following a delivery model that wider literature recognises as being best practice in optimising business outcomes.

Lord Willetts, Former Chair of the UK Space Agency

"[In Europe,] we only have companies like ICEYE and Open Cosmos because of initial quite small grants at the early stage. We need this support such that in 10 years' time, we will have another generation of dynamic, exciting new businesses [in the sector]."

Source: STFC interview

ESA BIC UK's overarching goal is to help innovative businesses transform promising ideas into sustainable, high-growth companies while strengthening the UK's contribution to the wider European space innovation ecosystem. In doing so, the programme aims to support both the growth of the UK space sector and the wider adoption of space-enabled technologies across the economy.



Source: ESA BIC website

3.2 ESA BIC UK's location at the heart of four leading innovation clusters

ESA BIC UK operates across four locations, each embedded within a leading science, technology or innovation campus. Together, these sites provide companies with access to specialist facilities, expertise and collaborative networks across different parts of the UK.



Harwell Campus, Oxfordshire

Harwell Campus is one of Europe's leading science and innovation campuses and is home to one of the UK's largest concentrations of space organisations, including both RAL Space and the Satellite Applications Catapult.⁵ The campus brings together government, industry and academia, creating opportunities for collaboration across research, technology development and commercialisation. For ESA BIC UK companies, Harwell provides access to an extensive space cluster alongside a broad range of scientific and engineering expertise.

Sci-Tech Daresbury, North West England

Located in the Liverpool City Region, Sci-Tech Daresbury is a national science and innovation campus centred around UKRI-STFC's Daresbury Laboratory and the Hartree Centre. The site is recognised for strengths in advanced computing, digital technologies, engineering and open innovation. ESA BIC UK companies based at Daresbury can draw on these capabilities and benefit from connections to the diverse innovation community there, helping their ability to take space technologies into non-space settings.

Royal Observatory Edinburgh, Scotland

ESA BIC UK's Scottish location is based at the Higgs Centre for Innovation within the Royal Observatory Edinburgh. The centre combines expertise in astronomy, space instrumentation, particle physics and technology commercialisation with dedicated incubation facilities. Companies can also benefit from the wider Royal Observatory Edinburgh ecosystem, including collaboration opportunities with the University of Edinburgh's Institute for Astronomy, access to UK Astronomy Technology Centre engineers and researchers, links to postgraduate students, and connections with national and international research collaborations involving organisations such as ESA, NASA and the European Southern Observatory.

Space Park Leicester, East Midlands

Space Park Leicester, managed by the University of Leicester, is a specialist hub focused on space research, manufacturing, applications and skills development. The site brings together researchers, businesses and students within a dedicated space innovation environment, helping companies, including those that ESA BIC UK supports, access talent, facilities and collaborative opportunities across the growing UK space sector.

Source: ESA BIC website

⁵ Harwell Campus, *Harwell Clusters*, available at: <https://www.harwellcampus.com/cluster-landing/>.

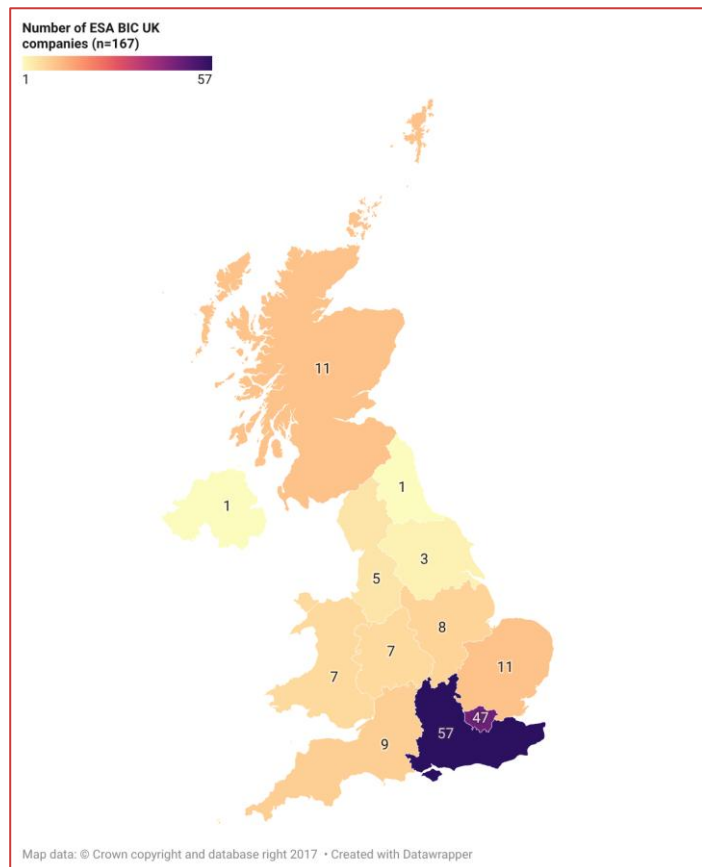
4 Supporting diverse UK businesses

Over the past 15 years, ESA BIC UK has supported a diverse range of businesses developing innovative products and services linked to space technologies and applications. While united by a connection to the space sector, these companies operate across a broad spectrum of industries, and are located throughout the United Kingdom. Together, they demonstrate how the space-related innovation that ESA BIC UK supports can create opportunities far beyond the traditional space economy, contributing to advances in areas such as environmental sustainability, healthcare, digital technologies, advanced manufacturing and transport. This section explores the breadth of businesses supported by ESA BIC UK and the programme's reach across regions, and different sectors of the UK economy.

4.1 ESA BIC UK's strong regional reach

ESA BIC UK has supported 179 businesses based across all regions of the United Kingdom. While the largest concentrations of supported businesses are located in the South East of England and London, the programme's portfolio includes businesses from every English region. Overall, 38% of supported companies are based outside London and the South East, including 11% located in Northern Ireland, Scotland and Wales. Some firms have also established premises at ESA BIC UK centres during their participation in the programme, helping to broaden their geographic footprint and strengthen links with local innovation ecosystems.

Recent evidence from London Economics shows that in 2022/23, productivity per employee in the UK space sector was double that of the UK average.⁶ Given this, ESA BIC UK is likely to have been a driver of high value added activity in different local areas across the UK.



⁶ London Economics (2025) *Size and Health of the UK Space Industry 2024*. Available at <https://www.gov.uk/government/publications/size-and-health-of-the-uk-space-industry-2024/size-and-health-of-the-uk-space-industry-2024#productivity>.

Spotlight on successes in different regions

Harwell

- **Open Cosmos** joined ESA BIC UK in 2016 to develop nanosatellites for the education market. During incubation, the company benefitted from funding, business support and access to the wider Harwell space ecosystem, helping it refine its commercial strategy and pivot towards broader satellite mission services. While participating in the programme, Open Cosmos launched its first satellite, secured an ESA contract, closed a \$7 million funding round and grew from 5 to 30 employees. The company's subsequent growth into a large international space business highlights the importance of early-stage support for ambitious ventures operating in the technically complex and capital-intensive space sector.

Leicester

- **Messium** joined ESA BIC in 2023 to develop their nitrogen management solution technology for the agriculture sector. During their participation, the company benefited from essential funding, mentorship and access to researchers, and the support to carry out trials to advance their technology and progress towards commercialisation. Messium achieved several milestones, including raising over £1.75m in funding.

Edinburgh

- **Aurora Avionics** joined ESA BIC UK in 2024 to develop next-generation modular avionics for launch providers at a lower cost and improved efficiency. As an incubatee, the company secured £320k in pre-seed investment, gained their first commercial order and acquired a large £500k contract and grew their team.

Daresbury

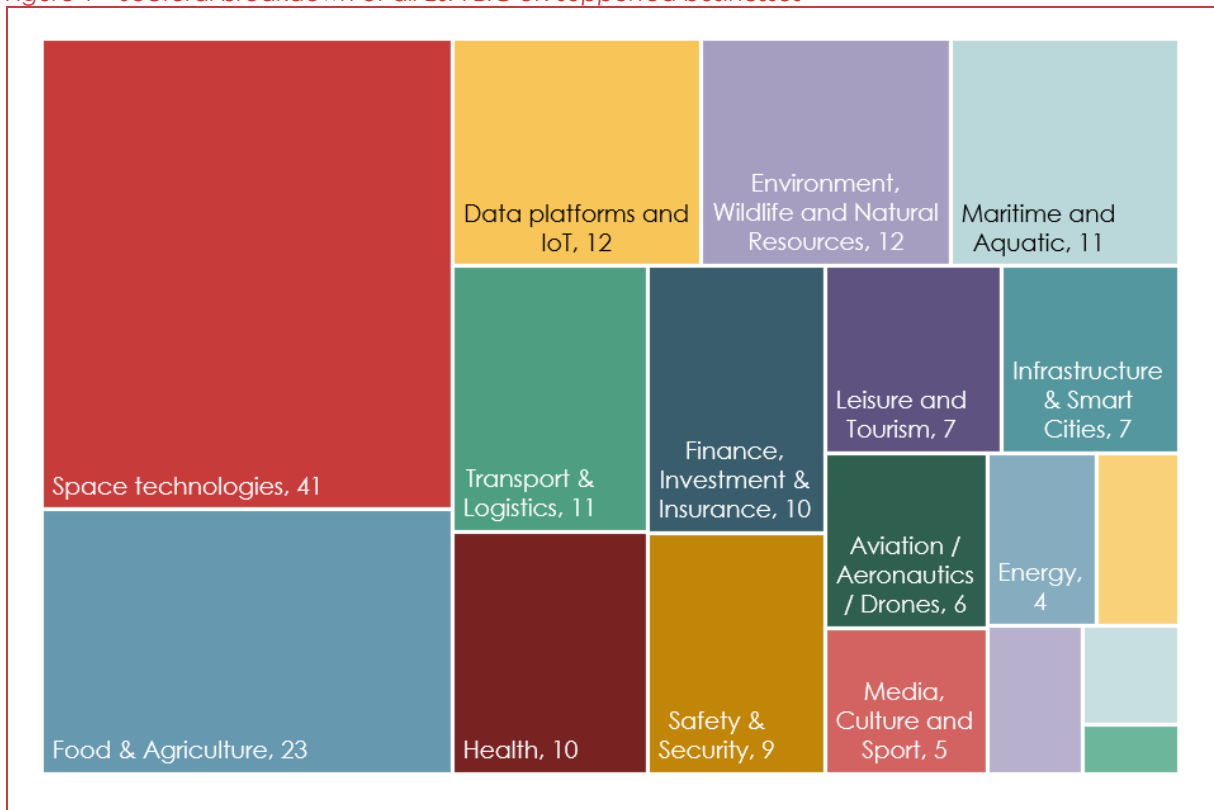
- **SmartIR** joined ESA BIC UK in 2021, to develop a graphene-based coating for satellites to support their temperature regulation. Since their participation in the incubator, the company took part in a successful launch on a SpaceX Transporter-12 mission, marking a milestone for the company.

Source: ESA BIC website

4.2 Reaching across sectors

ESA BIC UK-supported business activities span a broad range of markets. Incubatees and alumni operate across up to 17 sectors, including areas far removed from space, such as tourism and financial services. This diversity illustrates how technologies, data and expertise originating in the space sector, and which ESA BIC UK has helped exploit, can create value across many parts of the economy.

Figure 1 Sectoral breakdown of all ESA BIC UK-supported businesses



Source: Technopolis analysis of UKRI-STFC monitoring data (n=177). Unlabelled boxes are 3 for 'Communications', 3 for 'Unknown', 2 for 'Education and training', and 1 for 'Other'.

Figure 1 shows that space technologies dominate the sectors the ESA BIC UK businesses represent, while food & agriculture also accounts for a large proportion. There are, however, another seven sectors that have fairly even representation within supported businesses.

Below, we provide some examples that exemplify the diverse sectors that ESA BIC UK has helped support over the last 15 years.

	Space technologies	• Open Cosmos provides end-to-end satellite and data services that help organisations monitor the Earth from space, supporting applications such as environmental monitoring, agriculture and infrastructure management. • Magdrive provides electric propulsion systems, using electric plasma thrusters, for critical space missions.
	Food & Agriculture	• Crover develops robotic grain monitoring technology that moves through stored grain to measure temperature and moisture, helping reduce spoilage, waste and financial losses. • Soil Benchmark offers soils management plans for farmers and advisors, using a soil database mapping ~15% of England's farmland, helping them to make informed decisions about farmland whilst saving time and money.
	Data platforms & Internet of Things	• Omanos Analytics develops tools that combine satellite imagery and data analysis to improve transparency around the impacts of major infrastructure and development projects. • Lacuna Space provides direct-to-satellite connectivity for IoT sensors, in order to connect devices where a terrestrial network cannot reliably reach.
	Health	• BioOrbit is developing new ways to manufacture antibody-based cancer treatments in space, using the unique conditions of microgravity to improve how these medicines are produced. • Frontier Space is developing on-orbit manufacturing and testing for pharmaceutical research.

Source: ESA BIC website

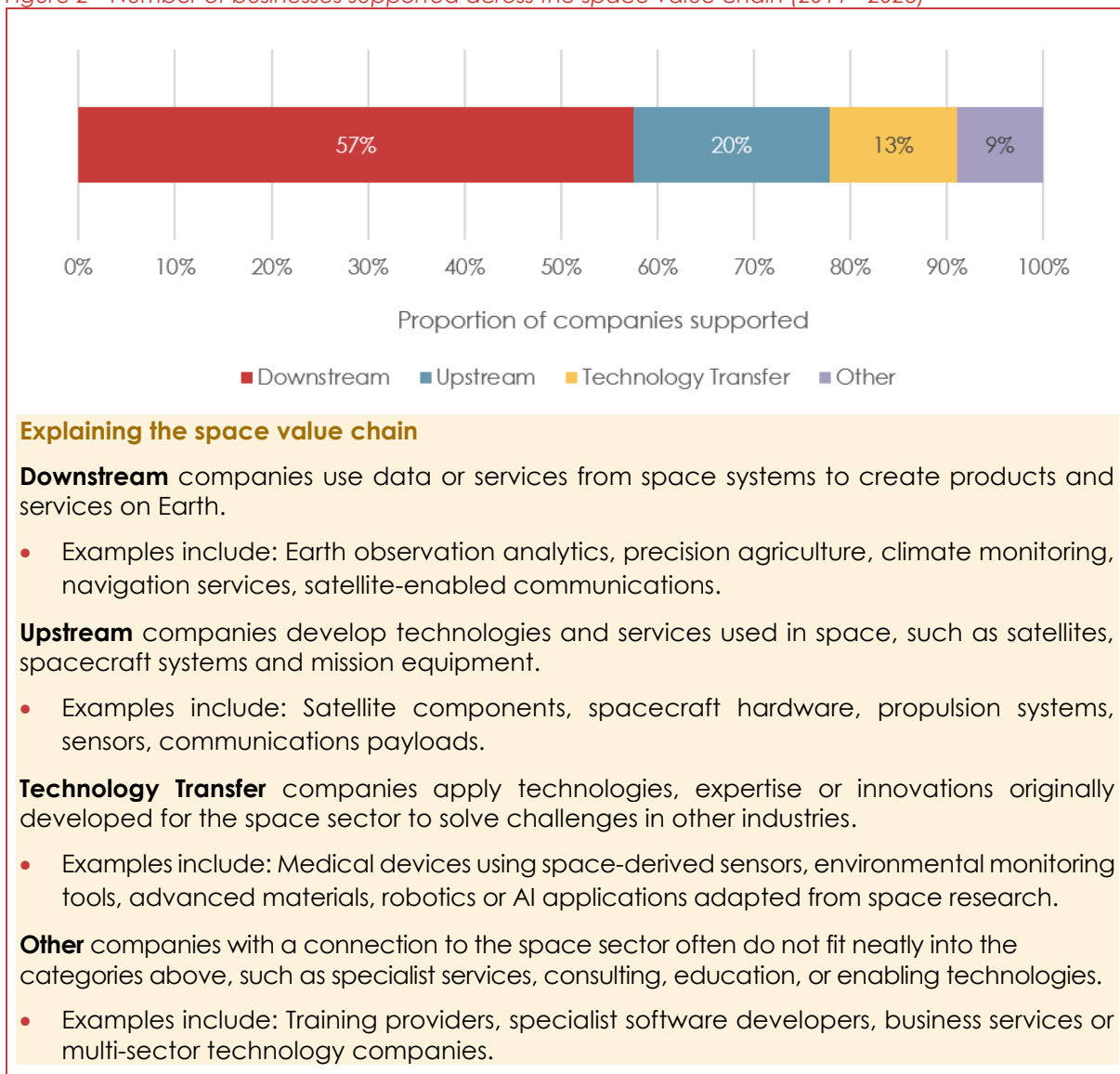
4.3 Reaching across the space value chain

ESA BIC UK supports businesses operating at different points within the space economy. Some companies develop hardware, technologies and services directly for use in space, such as propulsion systems or instruments for Earth observation, while others create downstream applications that use satellite data, communications or other space-enabled capabilities. The portfolio also includes organisations applying expertise and technologies originally developed for space to challenges in entirely different sectors. This mix helps strengthen the wider UK space ecosystem while encouraging the transfer of innovation into new markets.

Figure 2 shows that ESA BIC UK supports businesses across the space value chain. While 20% of the 167 supported businesses for which data is available are active in upstream technologies and operations in space, the largest share (57%) focus on downstream applications that use space technologies and data to deliver products and services on Earth. A smaller but still significant proportion of businesses (13%) are applying space-derived technologies in non-space sectors through technology transfer.

The proportion of upstream companies supported by ESA BIC UK has increased significantly in recent years. STFC data shows that between 2011 and 2020, of the companies that declared their position in the space value chain, 14% (of 96) focused on upstream applications. For 2021 to 2026, the corresponding figure was 37% (of 56). This highlights ESA BIC UK's growing relevancy to issues like supporting space technologies for national security and defence, and the programme's commitment to helping build and retain critical space capabilities within the UK.

Figure 2 Number of businesses supported across the space value chain (2011 - 2026)

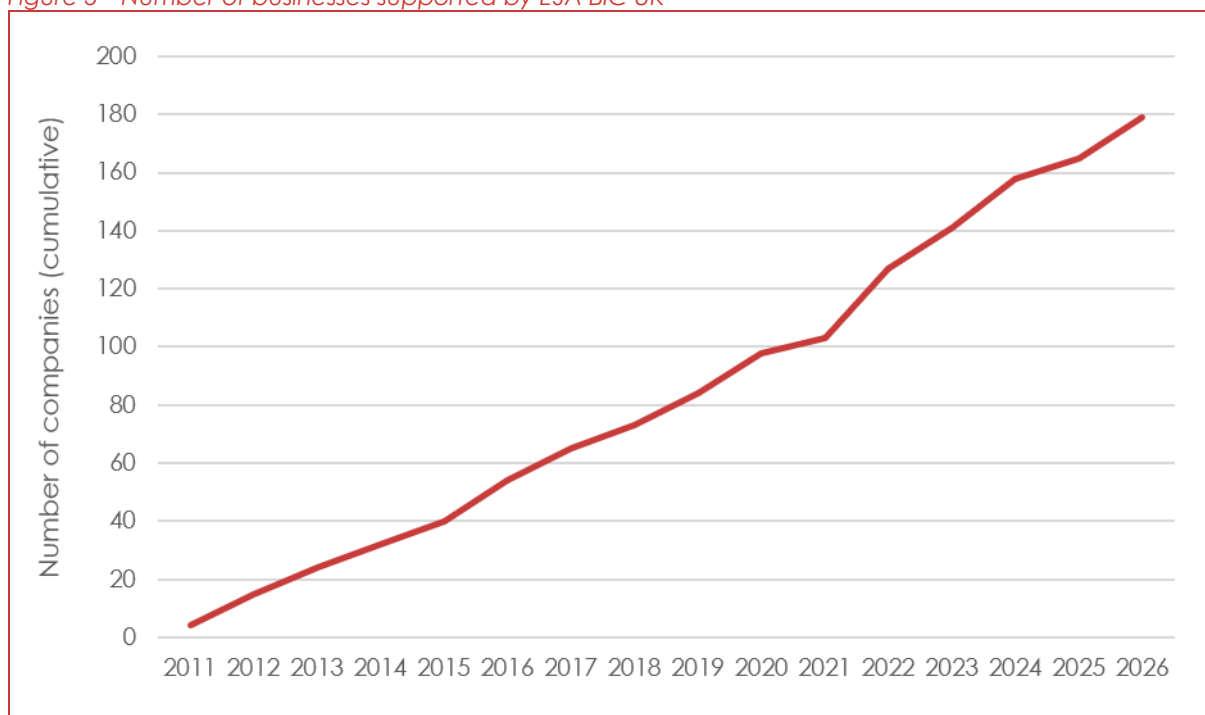


Source: Technopolis analysis of UKRI-STFC monitoring data (n=167)

4.4 Fifteen years of supporting new ventures

The number of businesses supported by ESA BIC UK has grown steadily since the programme's establishment, as Figure 3 shows. An average of 11 new companies have joined the portfolio every year, creating a growing community of entrepreneurs and innovators. This sustained pipeline of ventures highlights both continued demand for the programme and the increasing commercial opportunities associated with space-enabled technologies. By 2026, ESA BIC UK had supported a cumulative total of 179 businesses.

Figure 3 Number of businesses supported by ESA BIC UK



Source: Technopolis analysis of UKRI-STFC monitoring data

Most businesses supported by ESA BIC UK have now completed their incubation period and have joined the programme's alumni community. As of 2026, the portfolio comprised 155 alumni companies and 24 active incubatees. Analysis by RAND Europe found that UK BIC startups have a five-year survival rate of over 95%, showing the programme's role in supporting sustainable businesses.⁷ It also ensures that ESA BIC UK continues to contribute to the wider UK innovation ecosystem, creating an expanding network of businesses that continue to benefit from relationships formed through the programme.

Quotes from ESA BIC UK alumni

"The ESA BIC programme provided an invaluable initial springboard for the business."

"Without it, we may never have got going."

"Without [the programme] we would have probably given up."

Source: STFC surveys and case studies

5 Supporting economically impactful businesses

Since 2011, ESA BIC UK has supported businesses that have contributed to economic growth through job creation, investment attraction, and business expansion. By helping early-stage

⁷ RAND Europe (2025) *Evaluating the benefits of the UK's investments in the European Space Agency: Impact and value for money report*. Available at <https://www.gov.uk/government/publications/evaluating-the-benefits-of-the-uks-investments-in-the-european-space-agency/evaluating-the-benefits-of-the-uks-investments-in-the-european-space-agency-impact-and-value-for-money-report>.

companies access funding, technical expertise, facilities and networks, the programme has supported businesses as they grow from promising start-ups into established commercial ventures. The economic impact generated by these companies extends beyond the space sector itself, creating value for customers, investors and wider supply chains across the UK economy.

The businesses supported by ESA BIC UK employ people across a wide range of regions, sectors and skill areas. As these businesses have grown, they have created new employment opportunities in activities ranging from research and engineering to software development, manufacturing, and business services.

Jobs at alumni and at incubatees

Employment data available for ESA BIC UK-supported businesses indicates that, in 2025, these companies directly supported over **1060** full-time equivalent (FTE) jobs. Most of these roles were within alumni businesses (**95%**), reflecting the continued growth of companies after completing the incubation programme and their ongoing contribution to the UK economy.

Examples of notable business growth include:

- **Open Cosmos:** During its participation in ESA BIC UK, Open Cosmos grew from 5 to 30 employees, and has since grown to include over 130 employees across Europe.
- **Treeconomy:** Since their involvement with ESA BIC UK, Treeconomy's team has more than doubled. Since their graduation from the incubator, the company have continued to scale through product launches, partnerships and contracts.
- **B2Space:** Since graduating from ESA BIC UK, B2Space has grown to a team of over 20 individuals and amassed support from industry partners and acquired over 15 customers.
- **Lúnasa:** During its time at ESA BIC UK, Lúnasa drew on the programme's talent pool and network to recruit skilled engineers and accelerate its development. The company subsequently achieved a significant growth milestone through its acquisition by Infinite Orbits, illustrating how ESA BIC UK-supported businesses can develop valuable capabilities and intellectual property that strengthen the UK's space ecosystem and attract further investment into the sector.
- **Entocycle:** Since leaving the ESA BIC programme, Entocycle grew to a team of 13 and accessed various business growth programmes including the Pearse Lyons Accelerator and the Unreasonable Group growth-stage entrepreneurial programme.
- **Aurora Avionics:** During their involvement with ESA BIC UK, Aurora benefited from access to Edinburgh's talent pool, including from local universities and industries, enabling them to grow their team from two to ten individuals.

Source: ESA BIC website

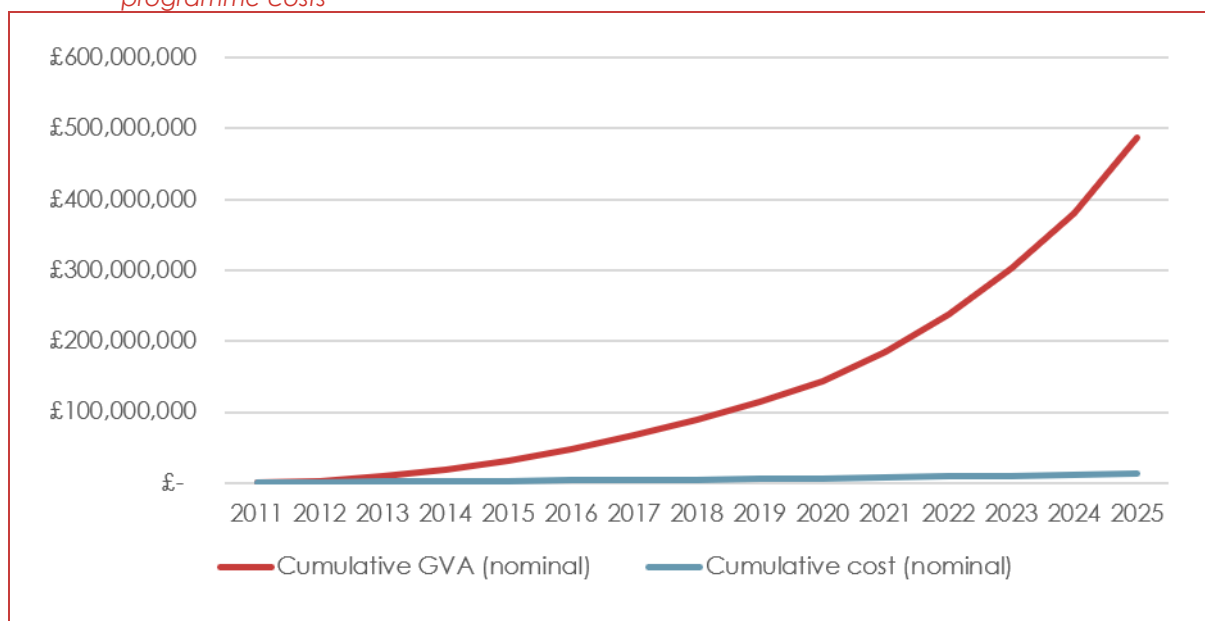
5.1 Generating value for the UK economy

Productivity and economic value creation can be measured using Gross Value Added (GVA). GVA represents the value that businesses add to the economy through their activities and is a widely used measure of economic contribution. It reflects the value generated through the goods and services that businesses produce and provides an indication of their productivity and economic impact.

Analysis of participating businesses indicates that the economic value generated by the portfolio, both current and alumni, has increased steadily over time. As Figure 4 shows, by 2025, the cumulative direct GVA associated with ESA BIC UK-supported businesses reached

approximately £486 million⁸, with businesses generating around £106 million⁹ of direct GVA (20% of the total) during 2025 alone (Figure 4). This growth reflects the continued expansion of the programme's alumni community alongside the ongoing development of current incubatees.¹⁰

Figure 4 Cumulative non-inflation adjusted GVA generated by all businesses supported, compared to programme costs



Source: Technopolis analysis of UKRI-STFC monitoring data

While this relationship should not be interpreted as a direct measure of attribution, it provides an indication of the scale of economic activity associated with the businesses supported through ESA BIC UK. The continued increase in cumulative GVA over time also suggests that many businesses continue to generate economic value after completing their incubation period, contributing to the programme's long-term economic legacy.

Figure 4 also shows that the economic value created by supported businesses has grown substantially over time while the programme costs have remained modest in comparison. Cumulative figures from 2024 indicate that in gross terms¹¹, every £1 invested in the programme was associated with approximately £35 of economic value¹² generated by participating businesses. Determining the additional benefits attributable to ESA BIC UK support would require systematic primary research with supported businesses, something which UKRI-STFC's data model does not currently incorporate. However, wider UKRI-STFC evidence of 77 surveyed

⁸ This equates to £573 million when all historic benefits are adjusted to June 2026 prices. Inflation calculated using the Bank of England Inflation Calculator. Available at <https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator>.

⁹ £109 million in June 2026 prices.

¹⁰ While ESA BIC UK support is likely to have contributed to the growth and performance of these businesses, GVA outcomes are also influenced by a range of other factors, including market conditions, private investment, management decisions, and other forms of support.

¹¹ i.e. not considering leakage, regional displacement, or attribution which the UKRI-STFC GVA model does not capture.

¹² £33 when all historic costs and benefits are adjusted to June 2026 prices.

ESA BIC UK-supported businesses¹³ shows that 30% of all full time equivalent employees (FTEs) amongst them is directly attributable to ESA BIC UK support. While further research would be needed to confirm the true level of additionality for all ESA BIC-UK supported businesses, applying this ratio to the gross GVA return implies a net GVA return of approximately £10.54 for every £1 spent (or £9.93 when adjusting all historic costs and benefits to June 2026 prices). **The programme has therefore generated considerably more economic value than the money put into it.**

This GVA return is also in line with two other comparable programmes. Both the University Enterprise Zones (UEZ) pilot and the SETsquared partnership are multi-site business incubator networks linked to universities. Additionally, like ESA BIC UK, both programmes adopt a multi-site model. Both programmes have also centred on high-tech sectors, although neither has an exclusive space focus like ESA BIC UK. Of the two programmes, SETsquared is in many ways a much closer comparator to ESA BIC UK: its Scale-Up Programme has previously supported space firms such as Space Forge which developed space-based advanced materials manufacturing.¹⁴

Table 1 Comparing GVA generated in ESA BIC UK for two other similar programmes¹⁵

Programme	Time period assessed	Total estimated expenditure (£000s)	Total estimated net GVA by supported businesses (£000s) - Net	Estimated Net GVA return for every £1 spent
ESA BIC UK	2012-2025	£13,950	£147,063 ¹⁶	£10.54
University Enterprise Zone Pilot ¹⁷	2017-2023	£48,900	£768,000	£15.71
SETsquared Scale-Up Programme ¹⁸	2018-2023	£7,650	£57,400	£7.50

Source: Technopolis analysis, and UKRI-STFC provided data

These results should be treated with a degree of caution. Direct comparisons between programmes are difficult, not only due to differences in the services being delivered and the types of business supported, but also the results are dependent on the underlying assumptions regarding the time period being examined, and what costs and benefits are included. In

¹³ Equating to 43% of the total population of 179 supported businesses.

¹⁴ SETsquared Partnership (2025) Space Forge secures record-breaking Series A funding to revolutionise industrial materials using space. Available at <https://www.setsquared.co.uk/space-forge-secures-record-breaking-series-a-funding/>

¹⁵ It is unclear whether the costs and benefits quotes in the reports for the two comparators were adjusted for inflation or not.

¹⁶ Calculated by applying at 30% additionality factor to a gross GVA figure of £486,157.

¹⁷ Taken from Technopolis (2025) *University Enterprise Zones: Final Impact and Process Evaluation*. Available at <https://assets.publishing.service.gov.uk/media/6836e57b8ade4d13a63236a3/university-enterprise-zones-final-impact-process-evaluation.pdf>

¹⁸ See figures in WECD (date unknown), *Economy of the Future: The economic and social impacts of the SETsquared Scale-Up Programme*. Taken from <https://www.setsquared.co.uk/wp-content/uploads/2023/09/7930-Scale-Up-Impact-Report-AW.pdf>. The study does not indicate whether the GVA figures are gross or net. We have assumed them to be net.

particular, UEZ and SETsquared cover a shorter time period than ESA BIC UK and supported substantially larger cohorts of businesses, with broader sectoral remits. Nevertheless, the evidence indicates that with these caveats, ESA BIC UK compares very favourably with similar business support programmes in terms of the GVA generated for the UK economy relative to public investment.

5.2 Attracting investment and finance

Quotes from ESA BIC UK alumni

"The business support and network have also been instrumental in positioning us for follow-on funding opportunities."

"It helped us do extremely early research without getting dilutive angel funding. This paved the way for us to close our investment rounds later on."

"Overall support from ESA and name recognition has been a huge boost to secure further investment, engage with customers and attract talent."

Source: STFC surveys and case studies

Access to finance is often critical for early-stage technology businesses, although their financing needs and strategies vary. ESA BIC UK supports companies as they develop commercial propositions, build credibility and engage with investors and funders. The programme actively connects businesses with potential sources of finance through investor introductions, pitch events, networking opportunities, and training activities involving investors and funding organisations.

 Magdrive Electric propulsion for satellites Founded in 2020, Magdrive have raised over £10m in funding to date. After graduating ESA BIC UK, Magdrive closed a £1.4m seed round, attracting key space industry funders. In 2025, Magdrive successfully raised \$10.5m in seed funding.	 Messium Hyperspectral imaging for agriculture Founded in 2023, Messium reached key funding milestones as an incubatee at ESA BIC UK, including: • £1.75m raised in funding, including £1.4m in pre-seed led by Superseed. • Winner of a £1m Innovate UK project for nutrient management.	 Aurora Avionics Modular avionics for launch providers Founded in 2023, Aurora Avionics attracted venture capital funding less than a year after incorporation. Funding included £320k in pre-seed investment in late 2024 and a £525k contract to supply avionics.
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Source: ESA BIC website

Most supported businesses (97%)¹⁹ have subsequently secured grants, venture capital investment and other sources of finance. This indicates that most supported businesses were able to access further resources for their development and growth, although not all companies seek private investment. Beahurst data show that 82 ESA BIC UK-backed companies have collectively raised around £640 million in private investment across 290 fundraising events, supporting product development, commercialisation and business growth. It is worth acknowledging that programme support may not be the sole explanation for securing finance.

Lord Willetts, Former Chair of the UK Space Agency

"There are a lot of people in the City of London in finance who think space is difficult, risky, scary and esoteric. Linking investors up with exciting space technology ideas in a way that promotes their willingness to invest is as important as getting proof of market, proof of concept, the basic startup funding. That really matters. The ESA BIC, among others, provides that support."

"[In the UK] we pride ourselves on our Venture Capital (VC) investment sector. We have got a fantastic opportunity with all our VC funds, but we want them to be investing in British companies. We need entities like ESA BIC UK to ensure the money is invested here in the UK, as well as Berlin or Singapore."

Source: STFC interview

6 Supporting innovation and technical advancement

Since its launch, ESA BIC UK has helped innovative businesses develop new technologies, bring novel products to market, and apply space-derived expertise to real-world challenges. The programme has supported both advances within the space sector and the transfer of technology, skills and knowledge into a wide range of industries, helping businesses turn innovative ideas into practical and commercially valuable solutions.

Quotes from ESA BIC UK alumni

"The support was instrumental in getting our novel technology off the ground quickly."

"Funding to enable R&D work which we could not otherwise have accomplished."

"The ESA BIC programme played a catalytic role in accelerating both our technology and our business model."

Source: STFC surveys and case studies

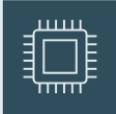
6.1 Enabling innovation

Innovation is not driven solely by funding. Access to expertise, facilities, networks and testing environments can be equally important in helping early-stage businesses overcome technical barriers and accelerate development. Some stakeholders have spoken of the important role that ESA BIC UK has played in bridging the gap between research and commercial

¹⁹ Excludes new joiners i.e. companies that joined ESA BIC UK during or after June 2026.

applications²⁰, and its centrality in research translation. The support landscape is complex and difficult to navigate: for example, both ESA and the UK Space Agency provide their own dedicated space funding programmes, while there is also a wider innovative support market through UK Research and Innovation (UKRI) and private financiers. It can therefore be difficult for early-stage businesses to identify what support is most appropriate for them and best suits their needs.

ESA BIC UK has helped space technology entrepreneurs navigate this in a variety of ways. It has provided companies with access to a broader innovation ecosystem that includes technical experts, research organisations, universities, leading testing and research facilities (e.g. RAL Space, Astronomy Technology Centre, and the Satellite Applications Catapult, among others), and sector networks.

 Aurora Avionics Accelerating rocket technology development Aurora Avionics develops modular avionics systems, often described as the "nervous systems" of rockets. These systems are designed to help launch providers reduce development time and costs while improving the performance and reliability of launch vehicles. Innovation supported by specialist facilities Through ESA BIC UK, Aurora Avionics gained access to laboratory facilities, environmental testing equipment and dedicated technical infrastructure at the Higgs Centre for Innovation in Edinburgh. Having testing facilities and skilled technicians close at hand enabled the company to accelerate prototype development and validate its technology more quickly. From prototype to commercial opportunity ESA BIC UK also provided funding and business development support to refine Aurora's commercial strategy. This combination of technical and business assistance helped the company progress from early-stage development to securing investment, expanding its team and winning its first commercial contracts.	 SmartIR Making thermal imaging more accessible and actionable SmartIR develops thermal imaging technology that can monitor infrastructure, industrial equipment and environmental assets. By using heat signatures to identify faults or areas of concern that are difficult to detect, its technology helps organisations improve safety, reduce maintenance costs and make better-informed decisions. Advancing technology through ESA BIC UK ESA BIC UK supported SmartIR as it refined its technology, strengthened its commercial proposition and explored new market opportunities. Access to technical expertise, business support and networks helped accelerate development and prepare the company for wider commercial adoption. Turning innovation into real-world applications Through incubation, SmartIR advanced the development and validation of its technology, creating opportunities to deploy its solutions in operational settings. The company demonstrates how ESA BIC UK helps innovative businesses transform promising technologies into commercially viable products and services.
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Source: ESA BIC website

For many businesses, ESA BIC UK non-financial innovation support has enabled faster prototyping, product validation and technology development than would otherwise have been possible, as the examples in this section demonstrate.

ESA BIC UK centres are also well embedded into their local areas, helping foster further innovation in these localities. One stakeholder commented on how several graduates from the ESA BIC UK Harwell centre have chosen to remain on the wider campus. This in turn helps keep UK space businesses at the heart of regional innovation clusters, facilitating cross fertilisation of ideas and knowledge with others in the cluster ecosystem.

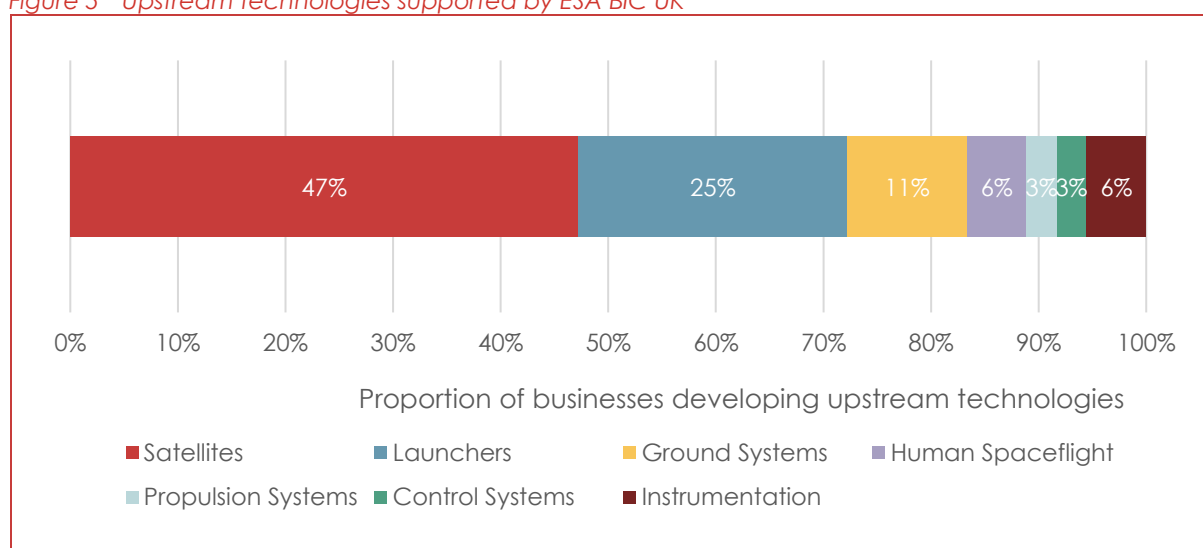
²⁰ RAND Europe (2025) *Evaluating the benefits of the UK's investments in the European Space Agency: Impact and value for money report*. Available at <https://www.gov.uk/government/publications/evaluating-the-benefits-of-the-uks-investments-in-the-european-space-agency/evaluating-the-benefits-of-the-uks-investments-in-the-european-space-agency-impact-and-value-for-money-report>

6.2 Supporting developments in space technologies

A significant proportion of ESA BIC UK-supported businesses are developing technologies specifically for the space sector. These innovations span multiple parts of the space value chain, from satellite hardware and communications systems to Earth observation applications, navigation technologies and space-enabled digital services.

Figure 5 shows that almost half of ESA BIC UK's support for upstream space businesses is focused on satellite technologies (47%). These businesses develop the spacecraft, equipment and capabilities that enable services such as communications, navigation and Earth observation. A further 25% of supported businesses work on launch technologies, helping to deliver satellites and other payloads into space. Ground systems account for 11% of supported businesses and provide the infrastructure, software and services needed to communicate with spacecraft, operate missions and make use of data collected in space.

Figure 5 Upstream technologies supported by ESA BIC UK



Source: Technopolis analysis of UKRI-STFC monitoring data (n=36)

Beyond established satellite, launch and ground-system technologies, ESA BIC UK has also supported companies developing capabilities in several areas identified by UK space policy as strategically important for future growth, resilience and national security. The UK Space Industrial Plan highlights priorities including Space Domain Awareness, In-Orbit Servicing, Assembly and Manufacturing (ISAM), satellite communications, and assured access to space. These technologies are expected to play a critical role in improving the sustainability of space activities, protecting critical infrastructure, enabling new commercial markets, and strengthening sovereign UK capabilities.²¹

Several ESA BIC UK-supported businesses are contributing to these emerging capability areas.

²¹ Department for Science, Innovation and Technology and Ministry of Defence (2024), *Space Industrial Plan: From Ambition to Action*. Available at: [GOV.UK](https://gov.uk).

Emerging capability area	Examples of ESA BIC UK-supported companies
Space Domain Awareness and in-Orbit service applications	Lodestar is developing autonomous sensing and decision-making technologies for detecting, characterising and responding to objects in orbit, supporting future Space Domain Awareness and in-orbit service applications
Space safety	Spaceflux has developed optical sensing and AI-enabled tracking systems that help identify and monitor satellites and space debris, addressing growing concerns around orbital congestion and space safety.
In-Orbit Servicing and Manufacturing	BioOrbit is developing technologies for large-scale pharmaceutical crystallisation in microgravity, demonstrating how space-based manufacturing could create new opportunities in life sciences and healthcare
Access-to-space and Space sustainability	Applied Atomics and Paladin Space are developing propulsion, orbital logistics and debris management techniques that contribute to future access-to-space and space sustainability capabilities.

By supporting companies at an early stage of development, ESA BIC UK has helped innovators explore technical concepts, demonstrate new capabilities, and develop products that contribute to the UK's growing space sector. The breadth of technologies supported over the programme's lifetime illustrates not only the diversity of innovation taking place across the UK space ecosystem, but also the programme's role in helping to develop technologies that align with the UK's future space ambitions, including areas linked to resilience, sustainability, security and emerging commercial markets. The examples below exemplify this.



Astron Systems

Making launch more sustainable

Astron Systems is developing the Aurora launch vehicle, a fully reusable rocket designed to make satellite launches more affordable and sustainable. By enabling rockets to be reused, the company aims to reduce costs and improve access to space.

Advancing critical technologies

Through ESA BIC UK, Astron Systems received funding and technical support to develop proof-of-concept hardware for key launch vehicle components. This helped the company progress important technologies needed to deliver its reusable launch system.

Building a platform for innovation

ESA BIC UK also provided business mentoring, investment support and guidance on intellectual property. This enabled Astron Systems to strengthen its technology strategy, secure further funding and continue developing innovative solutions for the future space economy.



Lúnasa

Factories beyond Earth

Lúnasa is developing technologies that could enable manufacturing and industrial activities in space. The company's vision is to create infrastructure that allows materials and products to be produced in orbit, opening up new possibilities that are difficult or impossible to achieve on Earth.

Turning concepts into reality

Through ESA BIC UK, Lúnasa received support to advance product development and prepare its first technology demonstrator. Access to expertise, facilities and networks at Harwell helped accelerate the development of technologies needed for future in-space manufacturing.

Building the future space economy

ESA BIC UK also helped Lúnasa strengthen its commercial foundations through networking opportunities and support in securing additional funding. This has enabled the company to continue developing technologies that could support a new generation of space-based industries.

Source: ESA BIC website

6.3 Supporting developments beyond space

The benefits of space-related innovation are often felt far beyond the space sector itself. Satellite technologies underpin many everyday activities, from navigation and mapping services to weather forecasting, telecommunications, environmental monitoring and emergency response. Space-derived data and technologies also support sectors such as agriculture, transport, energy and healthcare, helping businesses, public services and citizens make better-informed decisions and use resources more efficiently.

ESA BIC UK has helped extend these benefits by supporting companies that apply space technologies, data and expertise to real-world challenges across a wide range of industries. Through this support, businesses have developed new products and services in areas including healthcare, environmental monitoring, agriculture, energy, robotics and digital technologies. Whether by adapting space-derived engineering approaches, applying advanced sensing technologies, or using satellite data to generate new insights, these companies demonstrate how investment in space innovation can create economic and societal value far beyond traditional space markets.



Smart Green Shipping

Space-enabled data for reduced shipping emissions

Smart Green Shipping combines satellite positioning, weather data and advanced analytics with its innovative FastRig wind propulsion system. By helping ship operators identify efficient routes and make better use of wind power, the technology can reduce fuel consumption and greenhouse gas emissions from maritime transport.

Using space-enabled data to cut shipping emissions

Combining real-time environmental data with advanced analytics, the company's systems help operators identify the most efficient routes and operating conditions. This enables ships to reduce fuel consumption and improve the environmental sustainability of maritime transport.

Accelerating development through ESA BIC UK

ESA BIC UK supported Smart Green Shipping during the early stages of technology and business development, providing funding, expert advice and access to specialist networks. This support helped the company strengthen its commercial proposition and advance the development of technologies that apply space-enabled capabilities to decarbonising global shipping.



Frontier Space

Using space laboratories to advance biotechnology

Frontier Space is developing miniature space laboratories that enable biotechnology and pharmaceutical research in microgravity. Its SpaceLab platform supports experiments such as cell culture and protein research that can benefit from the unique conditions found in space.

Turning space environments into tools for healthcare innovation

By enabling research in microgravity, Frontier Space is creating new opportunities for drug discovery and life sciences innovation. The company uses space-based research environments to support applications that could ultimately benefit healthcare on Earth.

Building a commercial platform through ESA BIC UK

ESA BIC UK supported Frontier Space with business mentoring, technical guidance, intellectual property support and introductions to investors and partners. The company has highlighted ESA BIC UK's role in helping strengthen both its technology and commercial development as it progressed towards orbital demonstrations of its SpaceLab platform.



Omanos Analytics

Mapping the impacts of conflict and climate change

Omanos Analytics uses satellite imagery and other data sources to help governments, charities and international organisations understand how conflict, displacement and climate change affect communities. By analysing changes visible from space, the company provides insights that can be difficult to obtain through traditional methods alone.

Applying space technology to global challenges

Through ESA BIC UK, Omanos Analytics received support to refine its product and technical strategy, helping the company strengthen how it combines satellite data with advanced analytics to deliver actionable insights for decision-makers.

From innovation to real-world impact

ESA BIC UK helped Omanos Analytics develop a clearer vision for its technology and market offering. This has supported the company's efforts to apply space-derived capabilities beyond the space sector, helping organisations respond to humanitarian, environmental and societal challenges.



Flox

Helping farmers monitor livestock

Flox developed a wearable monitoring system that helps farmers track the health and wellbeing of chickens, allowing potential issues to be identified earlier.

Translating remote monitoring technologies to farming

Through ESA BIC UK, Flox adapted sensor-based monitoring approaches used in space applications for use in agriculture. The programme supported the development of technology that continuously collects and analyses livestock data, helping bring advanced monitoring capabilities to poultry farming.

Innovation with wider societal benefits

By bringing advanced monitoring technologies into agriculture, Flox has helped show how space-inspired innovation can create practical benefits for other sectors. Its work highlights the potential for technologies developed for demanding environments to improve productivity, sustainability and animal welfare on Earth.

Source: ESA BIC website

6.4 Backing strategic capabilities and technology areas for the UK Government

ESA BIC UK has supported many of the objectives set out in the UK Government's National Space Strategy, including growing the UK's space economy, strengthening the country's science and technology capabilities, and developing resilient space technologies and services. The programme has provided early-stage support to businesses operating across the space value chain, from satellite hardware and in-orbit technologies to downstream applications that use satellite data to address societal and commercial challenges.²²

Lord Willetts, Former Chair of the UK Space Agency

"[Looking to the future,] there are big opportunities in both the earth-based use of space-generated data as well as in-space technologies. The UK Space Strategy has just come out and we're placing some specific bets on technologies like in-orbit servicing and manufacturing. We've got a decent chance for UK startups to become the major players in the space sector, [for example, companies like] Bio Orbit and Space Forge."

Source: STFC interview

Many ESA BIC UK-supported businesses also operate in sectors that have been identified by the UK Government as key drivers of future economic growth²³, including advanced manufacturing, life sciences, defence, clean energy, digital technologies, financial services and the creative industries. Examples from the ESA BIC UK portfolio include companies developing spacecraft propulsion systems, autonomous space technologies, AI-enabled decision-support tools, environmental intelligence platforms, biotechnology applications, carbon-risk insurance products and creative applications of space data. These examples illustrate how investment in space innovation can generate benefits beyond the space sector itself, supporting innovation and competitiveness across a wide range of strategic industries.

UK priority area	Examples of ESA BIC UK-supported companies
Space	Open Cosmos developed satellite mission services, securing investment and growing from 5 to 30 employees during incubation. Aurora Avionics is developing modular avionics to improve the performance and affordability of launch vehicles.
Earth observation and environmental intelligence	SmartIR developed advanced graphene-based thermal coatings for satellites. Alumni have also developed solutions that use satellite data to monitor environmental conditions, assets and infrastructure.
Agritech and food security	Messium combines space-enabled data with agronomic expertise to optimise nitrogen use, improving productivity while reducing environmental impacts.
Defence & security	Lodestar Space is developing technologies that support space domain awareness and the monitoring of activity in Earth's increasingly congested orbital environment.
Digital technologies	ESA BIC UK companies are applying satellite data, AI and advanced analytics to address challenges across sectors including infrastructure, environmental management and industrial operations.
Net zero and sustainability	Alumni have developed solutions supporting resource efficiency, environmental monitoring and evidence-based decision making for sustainability challenges.
Commercialisation	Open Cosmos progressed from an early-stage start-up to an international space business following incubation. SmartIR, Messium and other alumni have secured investment, customer contracts and technology validation.

²² UK Government (2021), *National Space Strategy*. Available at: [GOV.UK](https://gov.uk); UK Government (2023), *National Space Strategy in Action*. Available at: [GOV.UK](https://gov.uk); UK Government (2026), *UK Space Strategy*. Available at: [GOV.UK](https://gov.uk)

²³ UK Government (2026), *Invest 2035: the UK's Modern Industrial Strategy*. Available at: [GOV.UK](https://gov.uk)



Kita

Reducing risk in emerging carbon markets

Kita develops insurance products and risk advisory services for carbon and natural capital assets. By helping organisations manage uncertainty in environmental markets, the company is supporting the growth of climate finance, an increasingly important area of economic activity linked to the UK's net zero transition.

Building a space-enabled insurance offering

Through ESA BIC UK, Kita strengthened its biomass analysis, scenario modelling and risk assessment capabilities using space-derived data. This support helped the company transform an early concept into a robust commercial offering tailored to the needs of financial institutions and carbon market participants.

A pioneer in climate finance innovation

Since incubation, Kita has become a Lloyd's of London Coverholder and launched innovative insurance products for carbon and natural capital assets. The company demonstrates how ESA BIC UK is helping UK firms capture opportunities in rapidly growing environmental and financial services markets.



Lodestar

Autonomous tech for a congested space environment

Lodestar develops autonomous robotics and servicing technologies designed to identify and interact with objects in orbit. These capabilities support growing demand for space sustainability, in-orbit servicing and space security, all strategically important and fast-growing markets for the UK space sector.

Aligning innovation with market needs

ESA BIC UK helped Lodestar refine its technology and commercial proposition through incubation support and engagement with potential customers. This enabled the company to better align its autonomous robotics technologies with market requirements and emerging opportunities within the space sector.

Growing UK capability in space security

Lodestar completed an International Bilateral Fund project with The Exploration Company, demonstrating technologies for autonomously detecting and characterising objects in orbit. The company's progress highlights ESA BIC UK's role in supporting growth in strategically important space and defence markets.

Source: ESA BIC website

7 Strengthening the UK's space capabilities

7.1 Supporting the development of the UK space sector

As outlined earlier, consulted stakeholders spoke of there being some significant barriers to entry in the UK space sector given the complexity of the support landscape. ESA BIC UK has played an important role in helping companies overcome these barriers through a combination of funding, technical support, business mentoring and access to the wider space ecosystem. Stakeholders consistently emphasised that this support has not only benefited individual companies, but has strengthened the wider UK space sector by helping promising ventures become investable, scalable and commercially viable businesses. One stakeholder described ESA BIC UK as making a "massive hidden contribution to the space economy in the UK" by helping companies learn how to build businesses around products that customers want to buy, rather than simply developing technically interesting technologies.

In doing so, ESA BIC UK has helped create a healthy pipeline of maturing space start-ups in the UK. This has helped kickstart wider activity in the UK space industry. Indeed, analysis by BryceTech on the size and health of the UK Space industry found that between 2012 (roughly coinciding with when ESA BIC UK began) and 2021, the number of UK space startups increased from approximately 200 to approximately 1,200. Over the same period, total investment deals in UK space startups increased from approximately £10 million to £170 million. ESA BIC UK was not the sole driver of this growth; however, the evidence collected for this study suggests that it has acted as an important enabling mechanism within the wider innovation ecosystem, helping to create, strengthen and de-risk a generation of space businesses that have contributed to the expansion of the UK space sector. One leading figure in the UK space business sector commented that ESA BIC UK helped establish a pipeline of maturing, growth-

oriented companies that made later-stage acceleration and scale-up support viable. In this sense, ESA BIC UK has not simply supported individual start-ups; it has helped build the population of investment-ready businesses on which the wider UK space innovation ecosystem depends.

This pipeline is unlikely to be short-lived either. Technology companies, especially those with physical or manufactured products, take many years to become established once founded. That is why, 15 years following ESA BIC UK's launch, we are only now seeing some of the more 'upstream' focussed ESA BIC alumni starting to gain a real foothold in space use technology markets. For example, Open Cosmos was only incubated in 2016, while B2Space Ltd, incubated in 2018 took until 2026 to sign a strategic partnership with Airbus.²⁴ Both are examples of some of the earliest supported ESA BIC UK businesses now becoming important organisations in the space industry. In time, we would expect more recent ESA BIC UK graduates to start to realise their commercial potential, and therefore further boost the size and capability of the UK space sector. This shows the potential longer-term impacts that ESA BIC UK is likely to generate going forward.

"One of the strengths of the UK space sector is it is pretty much an end-to-end capability. And the great thing about the [ESA BIC UK] support that's there is it has been able to pick up those companies and accelerate them, regardless of where they were in the space value chain."

Former UK Space Agency official

"Helping those companies fast-track through starting and running a business... is a massive hidden contribution to the space economy in the UK."

Senior figure at UK Space

"Championing getting credible businesses to an investable... readiness level for such a long time has been incredibly powerful for the sector."

Senior stakeholder at Innovate UK

Source: Technopolis interviews

7.2 Helping diversify UK and European space activity

Previous research has shown the tendency for European space activity to be dominated by a small number of relatively large organisations.²⁵ Stakeholders commented that ESA is now looking for a more diverse supplier base, working with new companies that can bring new ideas to ESA activity. ESA BIC UK is contributing to this diversification by helping generate a steady ongoing stream of new space firms which now actively contribute to the UK space activity.

The growing and more diverse UK space sector is also beneficial to ESA activity. ESA BIC UK has close links to other ESA programmes, creating a natural pipeline for ESA BIC UK supported firms

²⁴ B2Space y Airbus GeoTech firman un acuerdo estratégico para impulsar operaciones estratosféricas avanzadas in 'Actualidad Aeroespacial' 10 March 2026. Available at <https://actualidadaeroespacial.com/b2space-y-airbus-firman-un-acuerdo-estrategico-para-impulsar-operaciones-estratosfericas-avanzadas/>

²⁵ Technopolis' 2022 evaluation of UK investments in ESA found that only six organisations accounted for 50% of the value of ESA contracts let to the UK between January 2020 and Q" 2021, while 21% of the contract value over this period went to one single organisation, Airbus GB. See Technopolis et al (2022) *Impact evaluation of UK investment in ESA*. Available at https://technopolis-group.com/wp-content/uploads/2022/10/3617-Impact-Evaluation-Report_PART-A_220427_FINAL-1.pdf

to then participate in European-level activity. For example, the ESA BIC UK team works closely with ESA's European Centre for Space Applications and Telecommunication, ECSAT, also based at Harwell. These links have helped create opportunities for ESA BIC UK companies to also participate in ESA applications programmes. We understand that ESA BIC UK helps promote other relevant ESA funding opportunities and explains the application processes involved in them. Therefore, with ESA BIC UK supporting new market entrants, it is possible that these will go on to participate in wider ESA programmes, helping diversify the ESA contractor base.

7.3 Supporting international space missions

ESA BIC UK's impact can also be seen through the technologies developed by alumni companies that have gone on to support international space missions and scientific programmes. They demonstrate how technologies originating in UK start-ups can ultimately become part of systems that support scientific discovery and services relied upon around the world.

One example is IoTa Technology, an ESA BIC UK alumnus that develops miniaturised magnetometers capable of accurately measuring Earth's magnetic field. The company has progressed from developing novel magnetic sensing technologies to supporting the MagQuest mission, with its Io-1 nanosatellite launched in 2026 carrying a specialised magnetometer payload. The mission is designed to collect high-quality geomagnetic measurements from space, helping scientists better understand changes in Earth's magnetic field. Geomagnetic data help maintain the World Magnetic Model, which is used internationally in navigation and positioning systems. These systems support applications ranging from aircraft and maritime navigation to mapping, surveying and location-based digital services.

This illustrates a broader point about the long-term value of space incubation programmes. Support provided to early-stage companies can eventually translate into technologies deployed in orbit, generating benefits that extend far beyond the original business. In this way, ESA BIC UK has contributed to strengthening the UK's presence in international space activities while enabling innovative technologies developed by UK companies to play a role in addressing scientific and technical challenges of global importance.

7.4 Improved reputation of UK space businesses

Stakeholders commented on the reputational benefits that ESA affiliation brings to businesses that are part of ESA BIC UK. The ability to associate themselves with ESA gives firms real credibility to funders (both public and private), and to possible collaborators. Stakeholders added that being part of the ESA network also opens up more opportunities with potential partners in European markets too. ESA BIC UK participation can therefore become a gateway to working with European partners, including ESA itself.

Quotes from ESA BIC UK alumni

"The credibility of associating with the ESA brand meant we got contracts we wouldn't have otherwise achieved."

"Being associated with ESA gave our business immediate legitimacy with customers, partners and investors who might otherwise have hesitated to work with an early-stage company."

"The validation supercharged our business, giving us accreditation to apply for other grants and win contracts."

Source: STFC surveys and case studies

8 Conclusions

- Over the last 15 years, ESA BIC UK has had a strong footprint across the UK economy, supporting 179 businesses across all parts of the UK, and covering sectors including not only space technologies, but also agriculture, health, energy, and culture and sport, amongst others.
- ESA BIC UK has also supported activity that is directly aligned with the UK Government's Industrial Strategy, and UK Space Industrial Plan.
- It has supported organisations across all parts of the value chain. An historic focus on downstream businesses that use space data for non-space purposes is shifting, with increasing numbers of upstream companies supported in the last 5 years.
- ESA BIC UK businesses have collectively made a positive effect on the UK economy:
 - As of 2025, supported or alumni businesses had over 1,060 FTE jobs, with several having seen employment growth in recent years.
 - Also as of 2025, ESA BIC UK businesses had collectively generated over £485 million GVA to the UK economy.
 - Analysis suggests that based on certain assumptions, for every £1 spent on the programme, ESA BIC UK companies have generated £10.54 of additional economic benefit through GVA attributable to their programme participation. This indicates a strong return on public investment and compares favourably with evidence from similar innovation and business support programmes.
- The programme has been central in fostering innovation, helping research translation, and providing non-financial support needed to support both space applications (especially satellites), and non-space applications.
- ESA BIC UK has generated wider benefits that go beyond just the businesses it has supported. These most notably include:
 - Supporting the development and maturing of the wider UK space sector as a whole by producing the pipeline of start-ups needed for UK space accelerators to be viable.
 - Helping diversify UK and European space markets which traditionally have been dominated by a small number of organisations
 - Supporting organisations whose technologies have flown on ESA missions
 - Helping enhance the reputation of the UK space sector to stakeholders, including in Europe.

Lord Willetts, Former Chair of the UK Space Agency

"The ESA BIC UK has created a lively ecosystem of entrepreneurial startups. It's a breeding ground from which you get high-growth gazelles: the rapidly growing, high performance and high-tech companies. You can never guarantee in advance which ones will make it, but some of the ESA BIC UK alumni are on their way now."

Source: STFC interview

Annex - Analysis Methods

This annex summarises the approach that UKRI-STFC and Technopolis took to assess the economic impact of the ESA BIC UK programme over the last 15 years.

Gross Value Added

The methodology for calculating GVA followed an approach developed by UKRI-STFC analysts, drawing on a Technopolis-developed methodology for ESA BIC UK in 2024. This approach converts the total employment (FTE) reported by ESA BIC UK-supported companies into GVA using Office for National Statistics (ONS) data. Companies' total employment is combined with the ONS data on total employment and total GVA by industry sector to estimate annual firm-level GVA. Adjustments are made for the companies' locations, using regional GVA indices, and for potential economic displacement. FTE reporting is consistent with ONS definitions. Only direct GVA is calculated.

FTE Data Sources

FTE data for ESA BIC UK companies is taken from survey data and Companies House filings. Survey respondents reported the number of full-time equivalent (FTE) jobs supported by their company in a given financial year. In the FY24/25 and FY25/26 surveys, respondents reported the number of FTE that were created or protected as a direct result of the ESA BIC UK programme, providing a measure of additionality. Attributable FTE totalled c. 30% of total FTE. FTE numbers for companies that did not respond to the surveys were taken from the relevant Companies House filings. FTE data are not available for FY11/12 to FY16/17 inclusive. The analysis team assumed that employment at firm level changed linearly, allowing employment to be estimated by extrapolating from known data. Outliers in FTE data are retained as these values may represent genuine high- or low-performing cases rather than errors.

Gross and Net GVA

Two headline GVA figures are reported. Gross cumulative GVA is calculated from the total employment of these companies. This figure should not be interpreted as a direct measure of attribution to the ESA BIC UK programme. Net cumulative GVA figure is calculated by multiplying gross GVA by the proportion of employment created or protected as a direct result of company participation in the ESA BIC UK programme (c. 30%).

Benefit cost ratio

Benefit cost ratios (BCR) divide the value of benefits by the value of costs. A BCR greater than 1 shows that a project's benefits outweigh its costs. UKRI-STFC provided the Technopolis team with estimates on the total cumulative programme costs of the ESA BIC UK over the last 15 years. This is combined with the net GVA figure described above to calculate the ESA BIC UK programme's BCR.

Direct comparisons of BCR across programmes are difficult as each programme has a different focus, and evaluations adopt different methodologies. The approach in this report examines two programmes that closely match the ESA BIC UK and the performance metrics studied. Other more qualitative approaches, such as a rubrics approach to assess value for money could be used, however, the monetised approach in this study is generally preferred by funders, especially in HM Treasury.

Nominal vs inflation-adjusted figures

Both nominal and inflation-adjusted GVA and BCR figures are provided as both methodologies have their advantages and disadvantages. As noted in the report, it is unclear whether BCRs for other programmes described in Table 1 used nominal or inflation-adjusted figures.



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